

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A ~~high availability~~ computing system comprising a plurality of servers connected by a first and a second network, wherein the servers include a group membership service operable to determine membership of a process executing on a server in the plurality of servers for an application distributed across two or more of the plurality of servers, said membership communicated between servers in the network utilizing a proposal message and a commit message, and further wherein the servers communicate with each other to detect server failure and transfer applications to other servers on detecting server failure.

2. (Currently Amended) A method of maintaining high availability in a server cluster having a plurality of ~~servers~~ nodes, the method comprising:
instantiating a group communications service, a group membership service and a system resource manager on each node of the plurality of nodes; and
communicating process membership in a group utilizing a proposal message and a commit message;
communicating between the group communications service, the group membership service and the system resource manager on each node to detect process failures and node failures;
transferring applications to other nodes on detecting node failure; and
updating, by the group membership service, process membership in a distributed application upon detecting a process failure on a server.

3. (Currently Amended) ~~An article comprising a~~ A computer-readable medium having instructions thereon, wherein the instructions, when executed in a computer, ~~create a system for executing the method of claim 2~~ perform a method comprising:

instantiating a group communications service, a group membership service and a system resource manager on each node of a plurality of nodes;

communicating process membership in a group utilizing a proposal message and a commit message;

communicating between the group communications service, the group membership service and the system resource manager on each node to detect process failures and node failures;

transferring applications to other nodes on detecting node failure; and

updating, by the group membership service, process membership in a distributed application upon detecting a process failure on a server.

4. (New) The computing system of claim 1, wherein the plurality of nodes includes an initiator node to send the proposal message to a coordinator node.

5. (New) The computing system of claim 4, wherein the coordinator node comprises a longest running node in the plurality of nodes.

6. (New) The computing system of claim 4, wherein the plurality of nodes are arranged in a network ring and wherein the coordinator node forwards the proposal message to a first node of the plurality of nodes, and wherein the proposal message is forwarded to each node in the network ring

7. (New) The computing system of claim 4, wherein the coordinator node issues the commit message upon receiving the proposal message from a non-initiator node in the network ring.

8. (New) The method of claim 2, wherein communicating the proposal message includes sending by an initiator node the proposal message to a coordinator node.

9. (New) The method of claim 8, wherein the coordinator node comprises a longest running node in the plurality of nodes.

10. (New) The method of claim 8, further comprising:

arranging the plurality of nodes in a network ring;

forwarding by the coordinator node the proposal message to a first node of the plurality of nodes; and

forwarding by the first node to a next node in the network ring.

11. (New) The method of claim 8, wherein the coordinator node issues the commit message upon receiving the proposal message from a non-initiator node in the ring.

12. (New) The method of claim 8, wherein upon receiving the commit message a node in the network ring performs the tasks of:

caching the commit message;

forwarding the commit message to a next node in the network ring;

upon completing forwarding the commit message delivering the commit message to each process of a process group on the node.

13. (New) The computer readable medium of claim 3, wherein communicating the proposal message includes sending by an initiator node the proposal message to a coordinator node.

14. (New) The computer readable medium of claim 13, wherein the coordinator node comprises a longest running node in the plurality of nodes.

15. (New) The computer readable medium of claim 13, wherein the method further comprises:

arranging the plurality of nodes in a network ring;

forwarding by the coordinator node the proposal message to a first node of the plurality of nodes; and

forwarding by the first node to a next node in the network ring.

16. (New) The computer readable medium of claim 13, wherein the coordinator node issues the commit message upon receiving the proposal message from a non-initiator node in the ring.

17. (New) The computer readable medium of claim 13, wherein upon receiving the commit message a node in the network ring performs the tasks of:

- caching the commit message;
- forwarding the commit message to a next node in the network ring;
- upon completing forwarding the commit message delivering the commit message to each process of a process group on the node.